

Editor
DWIGHT L. WILBUR, M.D.

Assistant to the Editor
ROBERT F. EDWARDS

For information on preparation of
manuscript, see advertising page 2

Policy Committee—Editorial Board

JAMES C. MACLAGGAN, M.D., San Diego
JOHN G. MORRISON, M.D., San Leandro
WILLIAM F. QUINN, M.D., Los Angeles
JOSEPH W. TELFORD, M.D., San Diego
CARL E. ANDERSON, M.D., Santa Rosa
HELEN B. WEYRAUCH, M.D.
San Francisco
DWIGHT L. WILBUR, M.D., San Francisco

EDITORIAL

The Rubella Nightmare

THAT RUBELLA (German measles) in early pregnancy damages the fetus was first brought to the attention of the medical profession in 1941 by the Australian ophthalmologist Norman Gregg,² who showed it to be a prolific cause of blindness, mainly from cataracts, as well as of congenital malformation of the heart. Swan,⁶ another Australian, soon amplified the list of fatal injuries by noting deafness, deafmutism, microcephaly with mental deficiency, and physical underdevelopment. The danger period in fetal life was then defined as the first trimester, and it was tacitly assumed that after this time infection of the fetus subsided. The American pandemic of 1964-65 with its estimated 2,500,000 cases and 20,000 damaged infants told a different story and brought into light what is now known as the rubella syndrome.⁵ Infection in the fetus (which included the placenta) was found to last not only through the rest of fetal life but, in surviving infants, for many months after birth. About 29 per cent of such infants died at or soon after birth. A hitherto unrecognized symptom complex emerged: thrombocytopenic purpura, jaundice, enlarged liver with hepatitis and enlarged spleen, areas of bone rarefaction, myocarditis, encephalitis and glaucoma were added to the previously well known complications. The continuance of active infections made these infants virus carriers who were a menace to other infants in the nursery, to nurses, to physicians and, indeed to any other persons, including pregnant women, with whom they might come in contact. In general ru-

bella has been shown to have approximately 50 per cent communicability on direct exposure.

It has been shown that more than one pregnant woman in six is susceptible to rubella. One well documented clinical study showed the risk of fetal defects from rubella to have been 47 per cent during the first month of pregnancy, 22 per cent in the second and 7 per cent in the third. Another study⁷ based on histological examination in cases of therapeutic abortion performed for rubella during the first four weeks showed that 80 per cent of the products of conception were affected. To the estimates of defects manifest at birth must be added an increment estimated at 50 per cent for defects discovered later, notably deafness which may not be discovered and properly dealt with until the school years. As early as 1962, before the "rubella syndrome" was recognized, Ingalls³ in discussing maternal rubella in the first trimester stated that "the risks are simply unacceptable."

Through the daily press and such popular periodicals as *Life* and *Reader's Digest* the public has become well informed of the rubella problem and there are few women who have rubella or are even exposed to infection during the early stages of pregnancy who are unaware of the risks involved. Such women face six to nine months of anxiety, often agonizing, unless the pregnancy is terminated spontaneously or therapeutically. The chances that Nature will lend a helping hand by means of spontaneous abortion or stillbirth are, according to recent study, almost negligible.

This brings up the problem of therapeutic abortion. The California statute, which dates from 1872, explicitly states that the only exception to criminal liability for the therapeutic abortion is when "the same is necessary to preserve her [the mother's] life"; but places the burden of proof for